REMARKS

Claims 1 and 3-31 are in the application. Claims 2 and 32-38 have been cancelled by previous amendment.

The allowance of claims 20-31 are noted.

By this amendment, claim 4 has been amended to more particularly set out applicants' invention. Applicants specification at paragraph [0013] for example, supports the change to claim 4.

Response to the 35 U.S.C. 103 Rejection

Claims 1, 5-10 and 15-17 were rejected under 35 U.S.C. 103(a) as being unpatentable over Williams et al., USP 5,545,909 ('909) and Williams, USP 6,060,752 ('752) in view of Daly et al, USP 6,236,087 ('087). This rejection is respectfully traversed in view of the remarks presented hereinafter.

Claim 1 calls for a semiconductor ESD structure comprising a semiconductor substrate of a first conductivity type having a first region of a second conductivity type and a first dopant concentration. A buried region of the second conductivity type is formed in the first region. A second region of the first conductivity type is formed in the first region and contacting the buried layer, and a third region of the first conductivity type is formed in the first region and contacting the buried layer. A first isolation region is formed in the first region between the second and third regions, wherein the second and third regions and first isolation region form concentric rings in the first region.

A first pair of oppositely doped regions is formed in the second region, and a second pair of oppositely doped regions is formed in the third region.

Applicants first submit that there is no motivation to combine the Williams references for at least the following reasons. As called for in claim 1, the second and third regions are of one conductivity type, while the buried layer is of a second conductivity type. In the Williams '909 reference, second region 1400 and third region 1408 are of one conductivity type and buried layer 1416 is of a second conductivity type. Yet as stated in the present Office Action, second and third regions 1400 and 1408 do not contact the buried layer in this reference.

In the Williams '752 reference, the second region 904 and the third region 910 are the same conductivity type as buried layers 926 and 928. Because of this distinction, applicants respectfully submit that one skilled in the art would not be motivated to use the teachings of the Williams '752 reference together with the teachings of the Williams '909 reference to arrive at applicants' claim 1.

Applicants submit that there is a further reason one skilled in the art at the time of the invention would not be motivated to combine the two Williams references. Specifically, the Williams '909 device is a MOSFET device, and the breakdown voltage of the device is determined in part by the doping concentrations of regions 1400/1408 and region 1444, which is a lightly doped epi region. In an ESD application, the breakdown voltage of the ESD device is set to a level higher than the anticipated operating voltage of the circuit. By extending regions 1400 and 1408 to buried layer 1416 in the Williams '909 device as the Office Action asserts is suggested from the Williams '752 reference, the

breakdown voltage would be significantly reduced because of the increased doping concentration of the buried layer, which would destroy the intended function of the Williams '909 device. It is well accepted that where the intended function of a device is destroyed by a proposed modification from an asserted combination of references, such a showing is evidence of non-obviousness, which applicants respectfully submit is the case with the two Williams references.

Applicants further submit that the Daly reference does not make up for the deficiencies of the two Williams references described above.

Additionally, applicants respectfully submit that the three-way combination of references (Williams '909, Williams '752, and Daly) fails to show or suggest at least a second region of the first conductivity type formed in the first region and contacting the buried layer, a third region of the first conductivity type formed in the first region and contacting the buried layer, and first isolation region formed in the first region between the second and third regions, wherein the second and third regions and first isolation region form concentric rings in the first region as called for in claim 1.

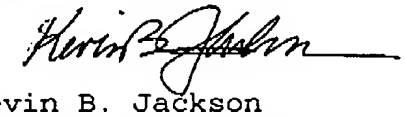
More particularly, both of the Williams references fail to show or suggest concentric rings at all, and further, in the Daly reference only element 93 and element 94 are rings. Element 92 is not shown nor suggested to be a concentric ring, but instead is shown as a solid rectangular shape (see e.g., FIG. 11).

Claims 5-10 and 15-19 depend from claim 1 and are believed allowable for at least the same reasons as claim 1.

In view of all of the above, it is believed that the claims are allowable, and the case is now in condition for allowance, which action is earnestly solicited.

Respectfully submitted,

Peter J. Zdebel et al.



ON Semiconductor
Intellectual Property Dept.
P.O. Box 62890; M/D A700
Phoenix, AZ 85082-2890

Kevin B. Jackson
Attorney for Applicants
Reg. No. 38,502
Tel. (602) 244-4885

Date: March 22, 2006